26. The superconducting composition of claim 23 wherein said composition has a crystal structure uncharacteristic of that of a K_2NiF_4 crystal structure.

REMARKS

During a telephone conversation initiated by Examiner Albrecht on November 6, 1989, Applicant's counsel was informed that a count was being formulated for an interference. The count Examiner Albrecht contemplated was as follows:

> "A superconducting composition exhibiting zero electrical resistance at a temperature of 77°K or above having the nominal formula $Y_aBa_bCu_cO_x$ wherein a is about 1.2, b is about 0.8, c is about 1.0, and x is about 2 to 4."

Examiner Albrecht drew counsel's attention to pending claim 18 of this application which in part reads:

> "A composition of matter comprising a Y-Ba-Cu-O complex of nominal formula $(Y_{1-x}Ba_x)_aCu_bO_y$, wherein "x" is 0.4, "a" is 2, "b" is 1, and "y" is about 2 to about 4, containing a superconductive crystalline phase consisting essentially of Y, Ba, Cu and O which has zero electrical resistance at 77°K or above, ..."

Examiner Albrecht stated that he was of the opinion that the following limitations set forth in claim 18 were unnecessary to patentability, namely:

> "... said superconductive crystalline phase having a crystal structure uncharacteristic of that of a K_2NiF_4 crystal structure, and said superconductive crystalline phase being present in said composition of matter in a quantity sufficient to provide the composition with a diamagnetic signal at 4.2°K corresponding to about 24% of the superconducting signal of a lead sample with similar dimensions."

Accordingly, Examiner Albrecht requested that Applicant file a Preliminary Amendment adding to this application a

new claim worded in like manner to the count which Examiner Albrecht was contemplating.

Parent application Serial No. 12,205 of this File Wrapper Continuation application is one in a sequence leading to Application Serial No. 32,041, which is presently in Interference No. 101,981 with multiple parties on an initially declared count as follows:

"Count 1

A crystalline essentially single phase composition having a perovskite like structure, exhibiting zero electrical resistance at a temperature of 70°K or higher, having the formula:

$A_1B_2Cu_3O_y$

wherein A is Sc, Y, La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu, or mixtures thereof:
B is Ba, Sr or mixtures thereof; and
y is a value that provides the composition with zero electrical resistance at a temperature of 70°K or above said composition having a purity of at least 90%."

Now pending in Interference No. 101,981 are various motions to substitute a different count, or alternatively, to add an additional count and to decorrespond various Party Chu claims from Count 1. These motions have not yet been decided.

Examiner Albrecht's telephone request that Applicant voluntarily add to this application a claim like the proposed count has been evaluated to determine the effect such action might have on Interference No. 101,981. It is obvious that the Examiner in suggesting a new interference count has come to realize that many of the limitations in the present Count 1 of Interference 101,981 are unnecessary to patentability, e.g. "single phase,"

"perovskite-like structure," and "a purity of at least 90%." For reasons explained below, Applicant submits that the newly proposed count is still too narrow to cover the common invention.

Applicant's position is that a seminal invention was made when Applicant conceived that yttrium be used as the rare earth metal constituent in a rare earth metal-barium-copper-oxygen composition for the purpose of enhancing the temperature at which such a Y-Ba-Cu-O composition would superconduct compared to that temperature at which a La-Ba-Cu-O composition superconducts.

Applicant believes that Count 1 of Interference No. 101,981 was and is much too narrow -- artificially and improperly narrow. Party Chu has moved to redefine Interference No. 101,981. Likewise, in this application, Applicant believes that a count such as the Examiner proposes for interference is much too narrow -- artificially and improperly narrow. Therefore, Applicant declines to add as an independent claim a claim as informally suggested by Examiner Albrecht. Of course, if an Office Action requires it to be copied, then Applicant will comply and then go through the dreary process of proposing substitute or new counts.

Applicant is adding by amendment to this application claims 22-26. Claim 24 depends through dependent claim 23 to independent claim 22. Via the dependency of claim 24, it is a claim substantially as requested by Examiner Albrecht. However, the subject matter of dependent claim 24 is but a species of the generic invention set forth in

independent claim 22. For this reason, Applicant has added a claim substantially as requested by Examiner Albrecht as a claim dependent to a genus claim rather than as a stand-alone independent claim.

Independent claim 22 defines subject matter patentable over the prior art and represents a more appropriate model for any "count" for an interference which Examiner Albrecht may be contemplating. Specifically, in Application Serial Nos. 2,089; 6,991; and 12,205, the prior art references cited to date are:

1. Komatu, U.S. Pat. 4,045,375 (1977);
2. Gopalakrishnan, J. Solid State Chemistry, V. 22, No. 2, pp. 145-149 (Oct. 1977);
3. Shaplygin, Russian Journal of Inorganic Chem., 24 (6), pp. 820-824 (1979);
4. Nguyen, J. Solid State Chem., 39, pp. 120-127 (1981);
5. Provost, Synthetic Metals, 4, pp. 157-167 (1981);
6. Er-Rakho, Journal of Solid State Chemistry, V. 37, pp. 151-156 (1981);
7. Murata, U.S. Pat. 4,357,426 (1982);
8. Nguyen, J. Phys. Chem. Solids., V. 44, No. 5, pp 389-400 (1983);
9. Beyerlein [I], U.S. Pat. 4,482,644 (1984);
10. Michel, Rev. Chim. Miner., 21, No. 4, pp. 407-425 (1984);
11. Kock, U.S. Pat. 4,645,622 (1987, filed 1985);
12. Beyerlein [II], U.S. Pat. 4,503,166 (1985);

13. Michel, Mat. Res. Bull., V. 20, pp. 667-671 (June 1985);

14. Bednorz & Muller, Z Phys. B. 64, pp. 189-193 (1986).

Of the cited references, only the Bednorz and Muller (14) reference addresses superconductivity as a property possibly existing in a rare earth metal-alkaline earth metal-transition metal-oxide composition.

Komatu (1), Murata (7) and Beyerlein [I] (9) do not discuss compositions which consist essentially of a rare earth metal-alkine earth metal-copper and oxygen. Nor do these references even mention superconductivity. Komatu (1) does not disclose nor suggest yttrium as a suitable rare earth metal and, in Komatu, the transition metal constituent cannot consist essentially of copper. In fact, Komatu neither discusses nor illustrates a copper containing composition. Murata (7) discusses a sintered body composition consisting of a mixture of a semiconducting compound and an compound oxide in ratios one to another of 1:100 to 100:1, preferably 1:50 to 1:1. For the semiconductive component of the body, Murata discloses a general formula wherein -- with perfect hindsight since hindsight is always perfect -- this component could be imagined to be an yttrium-barium-copper-oxygen composition. In fact, without the benefit of hindsight, Murata does not discuss nor illustrate any copper containing species. Murata illustrates but one yttrium containing species, namely a presintered composition of the formula $Y_{0.5}Sr_{0.5}CoO_3$ (entry 4-4 of Table 4) which prior to sintering is mixed with

90 wt% of $SiTiO_3$ to form the composition of Murata's sintered body invention. The compositions of Beyerlein [I] (9) in all cases contains either tin or bismuth in substantial quantities.

Gopalakrishnan (2), Kock (11) and Beyerlein [II] (12) do not at all address copper containing compositions. Such references do not at all address the property of superconductivity. None of these references deal with a rare earth metal-alkaline earth metal-copper-oxide. None in any way suggest that yttrium be used to replace the lanthanum of a lanthanum-barium-copper-oxygen composition to produce a superconductive composition consisting essentially of yttrium-barium-copper-oxygen.

Shaplygin (3), describes rare earth metal-alkaline earth metal-copper-oxygen compositions wherein the rare earth metal is La, Pr, Nd, Sm, Eu, and Gd. There is no suggestion of superconductivity for such compositions. There is no suggestion that yttrium may be used as the rare earth metal constituent in such compositions.

Each of Nguyen (4), Provost (5), Nguyen (8) and Michel (13) describe certain rare earth metal-alkaline earth metal-copper-oxygen compositions. None of these references in any way suggest that their compositions are superconductive. All are limited to compositions wherein the rare earth metal constituent consists of lanthanum. There is no suggestion in any of these references that other rare earth metals, much less yttrium, could or should be substituted for lanthanum.

The only reference relating to a rare earth metal-alkaline earth metal-copper-oxygen composition to

mention yttrium is Er. Rahko (6). In Er. Rahko there is no suggestion of superconductivity for such compositions. Er. Rahko mentions yttrium only as an element which may replace but a part of the lanthanum constituent in a formula such as $La_{3-x}Ln_xBa_3Cu_6O_{14+x}$ wherein, per Figure 1 of Er. Rahko, if "Ln" equals Y, then "x" equals about 1.5. The only yttrium containing species even mentioned by Er. Rahko is $La_2YBa_3Cu_6O_{14+x}$. Accordingly, Er. Rahko neither suggests nor makes obvious a superconducting composition consisting essentially of yttrium, barium, copper and oxygen.

As the Examiner is aware, the field of so-called "high temperature" superconductors began in late 1986 when an article by Bednorz and Muller entitled "Possible High T_C Superconductivity in the Ba-La-Cu-O System" appeared in Zeitschrift fur Physik B, Vol. 64, pp. 189-193 (14). The article described a mixed-phase (multiple chemical species) Ba-La-Cu-O system -- prepared from oxides of lanthanum, barium and copper -- which exhibited zero resistance at a temperature (T_{C_1}) below 13 K beginning with a loss of resistance at an onset temperature ("onset T_C" or "T_{CO}") around 35 K.

As noted above, the only such composition discussed by Bednorz and Muller as possibly superconducting is a lanthanum-barium-copper-oxygen composition. Bednorz and Muller do not mention or suggest that the lanthanum constituent be substituted by any other element -- much less by yttrium -- for the purposes of producing an oxide composition which superconducts at any temperature -- must

less at a temperature higher than that of a La-Ba-Cu-O composition as discussed by the reference.

Following this article, others reproduced the Ba-La-Cu-O system of Bednorz and Muller and observed it to exhibit the Meissner effect. That phase composition in the Ba-La-Cu-O system responsible for its superconductivity was soon identified to have a K_2NiF_4 type crystalline structure. Identification of the superconductive phase in the Ba-La-Cu-O system as having a "214" stoichiometry, $(Ba\text{-}La)_2Cu_1O_4$, and having a K_2NiF_4 type crystalline structure gave hope that still higher temperature superconductor compositions might be possible.

The art began making chemical analogs of the 214 type material. Dr. C. W. Chu, however, also took a different approach by totally replacing the La of a Bednorz and Muller Ba-La-Cu-O material with different elements in order to produce new materials containing phases of a crystalline structure other than the K_2NiF_4 type of Bednorz and Muller material.

Dr. Chu's invention is the conception that a composition superconductive at a temperature higher than that at which a La-Ba-Cu-O composition is superconductive could be prepared by substituting Y for La; indeed, to provide a superconducting composition consisting essentially of Y, Ba, Cu and O exhibiting zero electrical resistance at a temperature of 40°K or above.

Within Dr. Chu's inventive concept, a composition superconducting at a temperature of 40°K or above was first confirmed in a composition of <u>nominal</u> formula $Y_{1.2}Ba_{0.8}CuO_y$ ("y" = 2 to 4). This composition of

Y-Ba-Cu-O was observed by Dr. Chu to: (a) obtain zero electrical resistance at 80-90°K, (b) comprise a mixture of discrete green and black crystalline phases neither of which were characteristic of a K_2NiF_4 crystal structure, and (c) have a diamagnetic signal at 4.2°K corresponding to about 24% of the superconducting signal of a lead sample with similar dimensions. Subsequent analysis of the discrete green and black phases established that the green phase was of the formula $Y_2Ba_1Cu_1O_5$ and was an electrical insulator whereas the black phase was of the formula $Y_1Ba_2Cu_3O_z$ (z representing a variability in the oxygen content) and was the superconducting component. Further analysis of the black phase composition $Y_1Ba_2Cu_3O_z$ established that the oxygen content (z) of the composition could readily be varied from z = 6 to 7; at z = 6 to about 6.5 the $Y_1Ba_2Cu_3O_z$ composition was of a tetragonal crystalline symmetry and was not superconductive; at z = about 6.5 to 7 the $Y_1Ba_2Cu_3O_z$ composition was of an orthrombic crystalline symmetry and was superconductive.

Dr. Chu's development of superconductive Y-Ba-Cu-O composition having a zero resistance temperature (T_{c_1}) greater than 40°K was the invention that opened the way to a Tc_1 greater than 77 K -- the temperature at which liquid nitrogen boils. This broke the sound barrier for superconductors since, prior to the superconductive Y-Ba-Cu-O composition, even the very best 214 type of Bednorz and Muller lanthanum-alkaline earth metal-copper-oxygen superconductor required liquid helium as a coolant. Liquid helium is expensive -- about $11 a gallon -- and is awkward to use. With the seminal

invention of the superconductive Y-Ba-Cu-O composition, for the very first time it became possible to use liquid nitrogen as a superconductor coolant. Liquid nitrogen, at about 22 cents a gallon and much easier to handle, is a much more efficient coolant. The cooling power per dollar of liquid nitrogen is reportedly about 1000 times greater than that of liquid helium. [C&EN, May 11, 1987 at p. 8]

Unfortunately, Count 1 of Interference No. 101,981 as drafted can only permit a determination of which of the interference parties was the first to identify the stoichiometry of the black superconducting phase of Dr. Chu's seminal discovery, the superconductive Y-Ba-Cu-O composition. Inexplicably, current Count 1 does not cover the seminal discovery of the superconductive Y-Ba-Cu-O composition made from the oxides of yttrium, barium and copper -- the first composition in the history of the world to be superconductive at a temperature above the liquid nitrogen "sound barrier" of 77°K.

As initially declared, Count 1 of Interference No. 101,981, among other things, presupposes that a $Y_1Ba_2Cu_3O_z$ composition of 90% or greater purity which is superconductive at 77°K or above is a separate patentable invention in comparison to a composition of nominal formula $Y_{1.2}Ba_{0.8}CuO_y$ which is superconducting at 77°K or above because of its content of $Y_1Ba_2Cu_3O_z$ as a discrete phase constituent.

In Interference No. 101,981, Applicant has, inter alia, moved to redefine the interference on grounds that the act by opposing parties of merely analyzing the black phase of the nominal $Y_{1.2}Ba_{0.8}CuO_y$ composition to identify

it as being $Y_1Ba_2Cu_3O_z$ is not an act of patentable invention in the face of Applicant's disclosures, which to the other parties are prior art, that the black phase existed in the nominal $Y_{1.2}Ba_{0.8}CuO_y$ composition and that it was of a different crystalline composition than that of a "214" type of superconductor known in the La-Ba-Cu-O system as having a K_2NiF_4 type crystalline composition.

As before noted, these motions have yet to be decided in Interference No. 101,981, but the inappropriate initial count in that Interference has created a morass of preliminary motions to try to straighten out the priority contest. How the motions pending in Interference 101,981 are decided will not only have a bearing on the conduct of Interference 101,981 but on any new interference the Examiner proposes to set up at this time. Obviously, the Examiner must evaluate the interrelationship between a proposed interference and the existing one in order to follow a coherent policy of declaration.

As advised by Examiner Albrecht, for another interference a count is being contemplated which presupposes that a superconducting composition of nominal formula $Y_{1.2}Ba_{0.8}CuO_y$ is a separate patentable invention in contrast to a 90% plus purity $Y_1Ba_2Cu_3O_z$ superconductive composition or to a superconducting composition consisting essentially of Y, Ba, Cu and O. Applicant would respectfully disagree. The count being contemplated by Examiner Albrecht excludes the very <u>seminal invention</u> of a superconductive composition consisting essentially of Y, Ba, Cu, and O exhibiting zero electrical resistance at 40°K or above (or 77°K or above)

which was excluded in the first count of Interference No. 101,981. Of course, one cannot know whether the Examiner will or will not deem the broad statement of the invention to correspond to the restrictive count he now suggests as best defining the common patentable subject matter for a new interference.

As the Examiner is surely aware, a fundamental principle in formulating an interference count is set forth in MPEP § 2309.01:

> "2. A count should normally be sufficiently broad as to encompass the broadest corresponding patentable claim of each of the parties...."

This principle is fundamental since, as stated in Antos v. Juguin, 220 U.S.P.Q. 722 (Bd. Pat. Int. 1981):

> If the rule were otherwise, a party might be placed in the anomalous position of being foreclosed from proving priority as to a species outside the count, even though the species was within the party's claim designated as corresponding to the count.

220 U.S.P.Q. at 726.

This fundamental principle continues to control count formulation under the new rules of interference practice. Heymes v. Takaya, 6 U.S.P.Q.2d 1448, 1450 (Bd. Pat. Int. 1988). In Heymes, the Board was asked to review the propriety of the Examiner-in-Chief's granting Takaya's motion to substitute his claim 119 for the originally declared count. The Board laid the predicate for its affirmance by noting that:

> Takaya moved to substitute count 2 for count 1 so that the definition of the interfering subject matter, the count, would be sufficiently broad to encompass Takaya's broadest patentable claim designated as corresponding to the count, i.e. Takaya claim 119.

Heymes, 6 U.S.P.Q.2d at 1450.

The Board then held that:

> We agree with Takaya that he is entitled to a count which is broad enough to encompass Takaya's broadest patentable claim which is designated as corresponding to the count. Indeed, Takaya's position is a fundamental principle in interference practice, as set forth in the MPEP, §2309.01 "Formulation of Counts", where three principles are set forth for the formulation of counts. The second principle reads as follows:
>
> > A count should normally be sufficiently broad as to encompass the broadest corresponding patentable claim of each of the parties.
>
> Accordingly, we hold that the decision of the Examiner-in-Chief granting the Takaya motion to substitute count 2 for count 1 for the reasons set forth by Takaya was correct.

Heymes, 6 U.S.P.Q.2d at 1450.

As discussed above, there is no prior art reference which teaches or in any way suggests that a composition consisting essentially of Y, Ba, Cu, and O would be superconducting with zero electrical resistance at 40°K or above. Accordingly claim 22 is free of any objection under 35 U.S.C. §§ 102(a)(b) or 103. Claim 22 is fully supported under 35 U.S.C. § 112 by this and prior Chu applications having earlier filing dates. Claim 22 does not, of course, cover compositions of Y-Ba-Cu-O which are not superconducting with zero electrical resistance at 40°K or above. Hence, claim 22 does not read upon any previously known composition of Y-Ba-Cu-O, such as $Y_2Ba_1Cu_1O_5$ ("211").

The subject matter defined by claim 22 was constructive reduced to practice by Applicant's filings of Serial No. 2,089 (January 12, 1987) and Serial No. 6,991 (January 26, 1987). An actual physical reduction to practice of subject matter as defined by claim 22 occurred

before the filing of Applicant's Serial No. 12,205 (February 6, 1987) of which this application is a File Wrapper Continuation application.

For all of the foregoing facts and reasons, claim 22 is patentable to Applicant and should be held to be allowable. Claim 22 is of a scope that reads upon specific compositions of the formula $Y_{1.2}Ba_{0.8}CuO_y$ and $Y_1Ba_2Cu_3O_z$. This being the case, parties having applications on file which disclose such compositions should be required to add a claim like claim 22 to their applications for purposes of interference or, by refusing to add such a claim, enter a record disclaimer of such subject matter as an invention by them. (The opposing parties in Interference No. 101,981, in Applicant's view, have already in effect disclaimed such subject matter as their inventions.)

Any party who seeks to claim a superconductive composition of formula $Y_{1.2}Ba_{0.8}CuO_y$ or $Y_1Ba_2Cu_3O_z$ or any other compositional specific formula of Y-Ba-Cu-O as a separate patentable species invention from that of the class of composition defined by claim 22 should be required to first establish a prima facie showing that, with respect to the property of superconductivity, their particularly claimed compositional species differ in kind rather than mere degree from other specific compositional species of Y-Ba-Cu-O superconductors within the class defined by claim 22. And, even if they make such a prima facie showing, claim 22 still best sets out the basis for a priority contest on the broad patentable concept.

The count proposed by Examiner Albrecht as the subject of Interference No. 101,981 was a species count and so is the count which the Examiner now proposes. If Examiner Albrecht is of the opinion that a $Y_{1.2}Ba_{0.8}Cu_1O_y$ species is a "separate patentable invention" under 37 C.F.R. § 1.601(n) from the genus of "a superconducting composition exhibiting zero electrical resistance at a temperature of 40°K or above consisting essentially of yttrium, barium, copper and oxygen," then claim 22 cannot be corresponded to such species count. Yet in Interference 101,981, the Examiner broadly corresponded genus and subgenus claims to a species count without regard to the differences in the breadth of the corresponded claims.

It is clear from the "new" rules of interference practice that a generic claim should not be designated to correspond to a species count when the species is a separate patentable invention within the broader genus. (See 1062 O.G. 215-216 -- Example 4 relating to a species of "engine with a platinum piston" which is a separate patentable invention compared to the engine genus; claims to the engine genus are not designated to correspond to a count drawn to the separate patentable species of an "engine with a platinum piston.")

In soliciting public comments on proposed new rules for interference practice, the Patent and Trademark Office received a comment containing an "Example A" showing that proposed Rule 601(n) if applied on a "mutual basis" may preclude separate patentability of a species over a genus.

1062 O.G. 226-228 The response of the Patent and Trademark Office is reported at 1062 O.G. 228-229:

> "With respect to paragraph (1) of the comment, the standard of patentability will not be applied 'on a mutual basis.' Thus, if a species is patentable over a genus, the species is a 'separate patentable invention' from the genus. Compare In re Taub, 348 F.2d 556, 146 U.S.P.Q. 384 (C.C.P.A. 1965) (fluorine species might be patentable over genus of Markush group of hydrogen and halogen). A first count to a genus and a second count to a species which is patentable over the genus may properly appear in an interference. See e.g., Example 4."
>
> * * *
>
> "Analysis of Commentator's Example A
> Example A does not describe any practice under these rules, because 'same patentable invention' and 'separate patentable invention' under § 1.601(n) are not intended to be 'applied in a mutuality sense.' Where a first count is to a genus and a second count is to a species within the scope of the genus, there may be two counts if the species is separately patentable from the genus. The species is 'invention A' referred to in § 1.601(n); the genus is 'invention B' referred to in § 1.601(n)."

Example 4, (engine genus/engine with platinum piston species) as cited by the Patent and Trademark Office in the first quoted paragraph above, illustrates that in such a situation, genus claims should not be designated to correspond to a species count.

On the other hand, if a $Y_{1.2}Ba_{0.8}C_1O_y$ species or a $Y_1Ba_2Cu_3O_z$ species are not "separate patentable inventions" from the genus of claim 22, then it would be an error to establish as the count for interference a count limited to the $Y_{1.2}Ba_{0.8}Cu_1O_y$ species. To do so puts an applicant in a "Catch-22" situation; i.e., if the count is a narrow species, it prevents a party from relying on his best proofs but if he loses, his generic claims if corresponded

to the species count are lost -- claims as to which his proofs would have given him a priority judgment if the count were instead a genus count.

For reasons already discussed, Applicant submits that claim 22 is patentable and, as stated in MPEP § 2309.01, the fundamental principle is that "A count should normally be sufficiently broad as to encompass the broadest corresponding patentable claim of each of the parties." (Emphasis added).

Accordingly, of the claims presently pending in this application (claims 17-26), if an interference is to be declared on the species count as contemplated by Examiner Albrecht, the only composition claims which could be corresponded to such species count are claims 18 and 24. Genus composition claims 17, 19, 22, 23, 25 and 26 cannot be properly corresponded to such a species count. On the other hand, if an interference is properly declared, it will be declared on a count which is like claim 22 so that composition claims 17-19 and 22-26 would properly be corresponded to such a count and can abide the result of the interference on the broader count.

As noted above, it is of critical importance that broad claims not be improperly corresponded to a narrow count. A party is estopped from asserting patentability as to claims corresponded to a count as to which that party has lost the right of priority. See 37 C.F.R. § 1.658(c). If the species $Y_{1.2}Ba_{0.8}Cu_1O_y$ is separately patentable over the broader Y-Ba-Cu-O composition of claim 22, then a party's rights to a patent on the genus claim cannot be put in jeopardy based upon a

$Y_{1.2}Ba_{0.8}Cu_1O_y$ species count. In the event $Y_{1.2}Ba_{0.8}Cu_1O_y$ is considered to be a separate patentable species, two counts, one a genus and the second a species count, should be declared. Claims 17-19 and 22-26 would correspond to the genus count whereas only claims 18 and 24 would correspond to the species count. If the $Y_{1.2}Ba_{0.8}Cu_1O_y$ species is not separately patentable over the Y-BaCu-O genus of claim 22, then the interference should proceed upon a single genus count as to which claims to a $Y_{1.2}Ba_{0.8}Cu_1O_y$ species would properly correspond.

It is respectfully submitted that, for the foregoing reasons, the proper count for an interference is one like claim 22 as presented herein.

Respectfully submitted,

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Date: November 30, 1989